

ABSTRACTSPEECH PROCESSING SYSTEM

5 A speech processing system is provided which is operable
to receive sets of signal values representative of a
speech signal generated by a speech source as distorted
by a transmission channel between the speech source and
the speech processing system. The system stores data
10 defining a predetermined function derived from a signal
model which models both the speech source and the channel
and defining a probability density function which gives,
for a given set of model parameters, the probability that
the signal model has those model parameters given that
15 the signal model is assumed to have generated the
received set of signal values. The system applies a
current set of received signal values to the stored
probability density function and then draws samples from
it using a Gibbs sampler. The system then analyses the
20 samples to determine a set of parameter values
representative of the speech signal before it was
distorted by the channel.